

25495

S/043/61/000/002/005/009
D207/D306

10-1210

1327.2807

AUTHOR: Popova, I.A.

TITLE: An approximate analytical solution of non-vortical equations of supersonic flow around developable wings

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 2, 1961, 87 - 104

TEXT: This is a continuation of work by S.V. Vallander (Ref. 1: Razvertyvayushchiyesya kryl'ya, Vestnik LGU, no. 19, 1959) in which a set of differential equations is given for solving the flow problems around a developable wing. A wing is developable if: 1) The upper and lower surfaces can be developed. 2) The leading edge is a straight line. 3) Lines of flow emerging from the trailing edge and the tip intersect the contour of the wing only on the leading edge. (Fig. 1) shows the wing so constructed and the profiles are given by the following: profile OABC in $Z = 0$ in $Y = \varphi(x)$ O'A'B'C' is $y = \psi(x)$. Parameters are defined by

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An approximate analytical ...

$$\frac{dy}{dx} = \varphi'(x) = t; \quad \frac{dy}{dx} = \psi'(x) = \tau. \quad (1.1)$$

and parametric equations of the profiles are then

$$\begin{aligned} \left. \begin{aligned} x &= \varphi_1(t) \\ y &= \varphi_2(t) \end{aligned} \right\} & \text{(в сечении)} z=0(OABC), \\ \left. \begin{aligned} x &= \psi_1(\tau) \\ y &= \psi_2(\tau) \end{aligned} \right\} & \text{(в сечении)} z=1(O'A'B'C'), \end{aligned} \quad (1.2)$$

The flow is assumed to be steady, non-viscous and adiabatic, and the wing considered is thin, slightly bent, with small angle of attack. The differential equations given by

$$\begin{aligned} \frac{d\lambda_n}{dt} &= \frac{\alpha\lambda_n}{\pm \sqrt{\lambda_n^2 - a^2}} \Phi_2(t) - \lambda_n \Phi_1(t) \\ \frac{d\lambda_1}{dt} &= \lambda_n \Phi_1(t), \end{aligned} \quad (2.4)$$

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where

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$$\begin{aligned}\Phi_1(t) &= \frac{\sqrt{[q'(t)p(t) - p'(t)q(t)]^2 + p'^2(t) + q'^2(t)}}{p^2(t) + q^2(t) + 1}, \\ \Phi_2(t) &= \frac{[p'(t)q''(t) - q'(t)p''(t)]\sqrt{p^2(t) + q^2(t) + 1}}{[q'(t)p(t) - p'(t)q(t)]^2 + p'^2(t) + q'^2(t)}\end{aligned}\quad (2.5)$$

and

$$\lambda_n = \frac{v_n}{v_0}, \quad \lambda_\tau = \frac{v_\tau}{v_0}, \quad \alpha = \frac{a}{v_0},$$

v_0 = stream velocity are solved by the method of successive approximations and the results are obtained for up to and including the fourth order. The following condition of flow is utilized for determining

$$\lambda_y^{(n)} = t\lambda_r^{(n-1)} + (q - tp)\lambda_r^{(n-1)}, \quad n = 1, 2, 3, 4. \quad (3.10)$$

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Pressure and density on the surface of the wing (non-vortical flow) are then obtained, and are up to $O(t^4)$. The attached shock wave is constructed next, and it is shown that the solution obtained satisfies not only dynamic equations of fluid flow, but also the conditions on the attached shock-wave. Substitution shows, that the terms up to and including $O(t^3)$ cancel, and therefore, the solution is the solution of general equations of fluid dynamics, fulfilling the conditions of flow and conditions over the whole surface of the attached shock-wave, hence the solution to the $O(t^3)$ is the analytical solution of supersonic flow around a developable wing. It is also shown that if the tip of at least one profile has zero curvature, then the solution is valid to the $O(t^4)$ and in both cases ordinary differential equations given by S.V. Vallander (Ref. 1: Op.cit.) can be used. There are 1 figure and 2 Soviet-bloc references.

Card 4/5

POPOVA, I.A.

Study of plastid pigments by paper chromatography. Trudy Est.
inst. Ser. 4 no.16:154-164 '63. (MIRA 17:2)

83494

9.4174
18.6200

S/081/60/000/013(I)/012/014
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No.13 (I), p. 448,
53452

AUTHORS: Avgustinik, A. I., Popova, I. A., Gropyanov, V. M.

TITLE: Manufacture of Cermet Jackets for Plunging Thermocouples by
Hydrostatic Pressing

PERIODICAL: Tr. Leningr. tekhnol. in-ta im. Lensoveta, 1959, No. 57, pp. 107-108

TEXT: The method is described as follows: thoroughly mixed Al_2O_3 (or ZrO_2) powders and powderlike metal (Ti, Cr, etc.) were moistened up to 7% moisture, placed into an elastic rubber mold containing a steel roll, and subjected to water pressure, squeezing the rubber mold. During the pressing the powder was undergoing vacuum fusion. Cermet jackets were roasted in vacuum furnaces. The thermocouples withstood up to 15 heat changes at 1,650 to 1,720°C.

V. Autko

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

POPOVA, I.A.

Radiotherapy of esophageal cancer. Trudy Inst.klin.i eksp.khir.
AN Kazakh.SSR 5:18-20 '59. (MIRA 13:5)
(RADIOTHERAPY) (ESOPHAGUS--CANCER)

AVGUSTINIK, A. I., POPOVA, I. A., GROFYANOV, V. M.

Manufacturing protective cermet jackets for thermocouples by
plastic molding, stretching, and casting. Trudy LTI no. 57:105-106
'59. (MIRA 13:8)
(Thermocouples) (Ceramic metals)

SAPOZHNIKOV, D.I.; ALKHAZOV, D.G.; EYDEL'MAN, Z.M.; BAZHANOVA, N.V.; LEMBERG, I.Kh.; MASLOVA, T.G.; GIRSHIN, A.B.; POPOVA, I.A.; SAAKOV, V.S.; POPOVA, O.F.; SHIRYAYEVA, G.A.

Incorporation of O^{18} from heavy oxygen water into violaxanthin due to the action of light on plants. Bot. zhur. 46 no. 5:673-676 My '61.
(MIRA 14:7)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.
(Oxygen—Isotopes) (Violaxanthin)

NIKITIN, Yu.P.; TARANUKHINA, L.V.; SEREDINA, L.R.; PUSHKAREVA, S.A.;
POPOVA, I.A.; VERSHININA, N.V.

Activity of oxides in liquid aluminum silicates. Izv.vys.ucheb.
zav.; tsvet.met. 5 no.1:74-76 '62. (MIRA 15:2)

1. Ural'skiy politekhnicheskiy institut, kafedra tekhnologii silikatoov.
(Aluminum silicates) (Activity coefficients)

ROZENFEL'D, Ye.L.; POPOVA, I.A.; SHUBINA, A.I.

Liver α -1,4-exopolysaccharidase (α -amylase). *Biochimica*
26 no.6:1016-1021 N-D '61. (MIRA 15:6)

1. Institute of Biological and Medical Chemistry, Academy
of Medical Sciences of the U.S.S.R., Moscow.
(AMYLASES) (LIVER)

ROZENFELD, Y.I.; POTWA, T.A.; VINNITSKAYA, A.I.

Acid and neutral γ -amylases of the liver. Dokl. AN SSSR 163
no.6:1507-1509 Ag '65. (MIRA 18:8)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR. Submitted
November 12, 1964.

RCZENFEL'D, Ye.L.; PCPOVA, I.A.

Splitting of glycogen by exopolyglycosidase and endopolyglycosidase
in animal tissues. Dokl. AN SSSR 139 no.3:733-735 J1 '61.
(MIRA 14:7)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR.
Predstavleno akademikom A.I. Oparinym.
(GLYCOGENOLYSIS)

POPOVA, I.A.

Influence of vorticity in supersonic flow about wings of finite span [with summary in English]. Vest. LGU no.13:131-145 '61.

(MIRA 14:7)

(Aerodynamics, Supersonic)

AVGUSTINIK, A. I.; POPOVA, I. A.; GROPYANOV, V. M.

Manufacturing cermet jackets for immersion thermocouples by the
use of hydrostatic pressing. Trudy LTI no. 57:107-108 '59.

(MIRA 13:8)

(Thermocouples) (Ceramic metals)

SAPOZHNIKOV, D.I.; MAYEVSKAYA, A.N.; POPOVA, I.A.

Quantitative determination of chlorophyll a and b by paper
chromatography. Fiziol.rast. 6 no.3:376-379 My-Je '59.
(MIRA 12:8)

1. V.L.Komarov Botanical Institute, Leningrad.
(Chlorophyll) (Plants--Chemical analysis)
(Paper chromatography)

SAPOZHNIKOV, D.I.; ALKHAZOV, D.G.; EYDEL'MAN, Z.M.; BAZHANOVA, N.V.;
LEMBERG, I.Kh.; MASLOVA, T.G.; GIRSHIN, A.B.; POPOVA, I.A.;
SAAKOV, V.S.; POPOVA, O.F.; SHIRIAYEVA, G.A.

Participation of xanthophylls in oxygen transport in the
process of photosynthesis. Dokl. AN SSSR 154 no.4:974-977
F '64. (MIRA 17:3)

I. Botanicheskiy institut im. V.L. Komarova AN SSSR. Pred-
stavleno akademikom A.L. Kursanovym.

DULOVA, V.I.; POPOVA, I.A.

Strength of acids in acetophenone and benzophenone. Trudy SAGU
no.134:63-67 '58. (MIRA 12:4)
(Acids, Organic) (Acetophenone) (Benzophenone)

POPOVA, I.A.

~~Leaf~~ fragments of Pamir plants [with summary in English]. Bot.zhur.
43 no.11:1550-1561 N '58. (MIRA 11:11)

1. Pamirskaya boilogicheskaya stantsiya Botanicheskogo instituta
Akademii nauk Tadzhikskoy SSR.
(Pamirs--Color of plants)

SAPOZHNIKOV, D.I.; BAZHANOVA, N.V.; MASLOVA, T.G.; POPOVA, I.A.

Pigment extraction from unicellular green algae. Bot. zhur. 46
no.10:1543-1544 0 '61. (MIRA 14:9)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR, Leningrad.
(Pigments) (Extraction (Chemistry)) (Algae)

POPOVA, I.A.; BACHANINA, A.V.; GORODNEVA, I.A.

Some characteristics of the photochemical conversion of xanthophylls
in isolated chloroplasts. Bot. zhur. 19 no. 8:858-863 1976.

1. Botanicheskiy institut imeni V.I. Komarova AN SSSR Leningrad.
(1 IPA 17:30)

KUZNETSOV, V.A.; POPOVA, I.B.; DUPLINA, L.N.

Electrocapillary phenomena on Tl - Bi alloys and their surface
tension in a vacuum. Zhur. fiz. khim. 36 no.4:880-884 Ap
'62. (MIRA 15:6)

1. Ural'skiy universitet.

(Electrocapillary phenomena) (Thallium-bismuth alloys)
(Vacuum)

S/196/61/000/007/501/079
D201/D305

AUTHORS: Nokaln, V.E. and Popova, I.B.

TITLE: An inductive voltage divider

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 3, abstract 7 A17 (V sb. Vopr. obshch. elektro-priborostr. Kiyev, AN USSR, 1960, 226-232)

TEXT: A description is given of an inductive voltage divider based on 2 toroidal step-auto transformers. The choice of a toroidal, rather than of a shell-type transformer was determined by the requirement of smaller errors introduced by reactive voltage drops. In addition the leakage fields were decreased by using a special type of winding. The changes in the amplitude and phase of the voltage applied to the divider input are made by means of calibrating and phasing circuits. The inductive divider was designed to work at frequencies of 400-500 c/s with input voltage up to 110 V. The division factor is from 0.0001 to 1. The error in amplitude division is

POPOVA, I.I., kand. tekhn. nauk, starshiy nauchnyy sotrudnik

Black spots on glass. Stek. 1 ker. 20 no.10:34-35 0 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stekla.
(Glass—Defects)

KOROBITSYNA, I.K.; POPOVA, I.I.; GAYDAMOVICH, N.N.; YUR'YEV, Yu.K.

Properties of 4-hydroxymethylen-2,2,5,5-tetraalkyl-3-furandiones.
Zhur.ob.khim. 31 no.8:2542-2548 Ag '61. (MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.
Lomonosova.

(Furandione)

GAPONENKO, G.S.; GRITSKOV, M.K.; POPOVA, I.K.; KOSTIN, V.P., red.

[For creative agricultural planning] Tvorcheski planirovat' sel'skoe khoziaistvo. Moskva, Ekonomika, 1964. 126 p.
(MIRA 17:12)

POPOVA, Irina Konstantinovna; GAVRILOVA, M.

[In the interests of collective farms and the state] V interesakh kolkhozov i gosudarstva. Moskva, Mosk.rabochii, 1959.
62 p. (MIRA 13:3)
(Agriculture--Economic aspects)

FALSE I BOOK EXPLOITATION BOV/4407

Abdumomlyu o'zbek O'zbekistonoy G'IR. Institut o'zbekiroshchilik

Voprosy obshchego elektromekhanizma (Overall Problems of the Electric Instrument Industry) Kiev, 1960. 262 p. 3,000 copies printed.

Additional Sponsorship Agency: Nauchno-tekhnicheskoye obshchestvo pribovostroytel'nyy promyshlennosti. Uchenikskoye tvorcheskoye pravleniye.

Authorial Note: A. D. Bystrovskii, Corresponding Member, Academy of Sciences USSR, Institute of Chemical Sciences, 190091, Leningrad, U.S.S.R.

REMARKS: This book is intended for technical personnel working in the field of electric measurement techniques, in electrical instrument plants, in laboratories of electric power systems and in electric measurement laboratories of plants.

CONTENTS: This is a collection of reports presented at a conference on the overall development of the Soviet statistical industry held in Kiev on October 3-7, 1966. The conference was convened by the Institute established at IKAN (Institute of Electrical Engineering, Academy of Sciences, USSR) and the Ukrainian Republic Academy of Sciences and the Institute of Probability and Statistics of the USSR Academy of Sciences. The main topics of the conference were: "Problems relating to electrical industry as a whole" (reports by A. D. Berezin, V. P. Orlovsky, V. S. Arshavsky, Yu. G. Berezin); "Problems relating to electrical industry: the automation of electric measurements" (V. S. Arshavsky, E. E. Mosyakov); "The automation of electric-measuring circuits" (A. Ya. Shchegolev, L. N. Klyuz, and L. G. Doroshenko); "Problems relating to the use of electrical measuring instruments in the theory and practice of magnetic measurements" (S. M. Sklyar, and V. G. Doroshenko). Attending the conference were members of scientific research institutes and schools of higher education, along with representatives of the main electric instrument plants ("Elektro" in Leningrad, "Elektroinstrument" in Kiev, "Elektroinstrument" in Odesa, and in Krakow and others) and of various scientific power systems. The proceedings are published in Ukrainian, with an English summary of the reports.

Memorandum - For Materials for Sewing Machine
The author has completed a list of 10 items of

The author recommends allots of psalmus with 20% A₂ and 6-7% N₂ as material for breeding. There are 6 references: 3 English, 1 German and 2 Soviet.

• 228

Robt. B. Y. K. and J. S. Poyner. Induction Voltage Divider
The authors recommend the manufacture of Induction voltage
dividers by electric measurement plants.

226

Wyrlik, J. L. T. Analysis of Circles Used for the Measurement of Small Constant $D.F.'s$.

233

voltages and makes a comparative evaluation of these circuits from the point of view of their usefulness in working conditions when starting small engines of power sources characterized by a large or considerably changing internal resistance. There are 10 figures, 8 tables and 2 formulas.

Figure 1

Approximate Measuring Power With the Help of Hammer-type Distances

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of a tungsten filament and a nichrome heater placed in a glass insulating tube. The bolometers were developed, designed, produced and tested. The devices are based on materials consisting of a tungsten filament and a nichrome heater placed in a glass insulating tube. The bolometers demonstrated the required characteristics which is a characteristic of static power components. There are 3 references: 2 Soviet and 1 English.

Brusilov, A. Ya. Automatic Device With Digital Feeding

257

One of the most striking facts is the fact that in the USA digital computers have been produced by more than ten firms since 1959. There are types of computers that have found a wide application in industry. In the USSR, very little has been done on this subject. The authors also are developing an electroacoustic type of digital device with automatic balancing and mechanical count. The device would serve for presentation of various electrical quantities: voltage, current, resistance, etc. A description of the device is included, there are 7 references: 1 Soviet, 1 Polish, 1 German, 1 Japanese, and 4 English.

AVAILABILITY: Library of Congress
Date 12/12

JP/ren/ren
11-15-60

IVERONOVA, V.I.; POPOVA, I.I.; REVKEVICH, G.P.

Effect of faults in the packing of layers on the intensity of Debye lines. Kristallografiia 5 no.4:530-534 J1-Ag '60. (MIRA 13:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Brass--Spectra)

NAME OF : Cultivated Plants. Commercial. Oleiferous.
 Cuznetz-Boriska
 AMS. JOUR: Red Star in Biology, No. 3, 1957, pp. 47-59
 AUTHOR : Madraimov, I.M.; Popova, I.M.; Popov, G.P. *
 INST. : AS Uzbek SSR
 TITLE : Production Experiments in Applying Liquid
 Nitrogen Fertilizers under Cotton in 1956.
 ORIG. PUB.: V sb.: Ref. nauchno-issled. rabot po khlop-
 kovoystvu. Tashkent, AN UzSSR, 1957, 156-179
 ABSTRACT : Comparative study of liquid ammonia and
 ammoniate (A) in the kollektives of Uzbek SSR
 in 1956 on different soils showed them to
 be equally effective. In a number of labora-
 tory tests the volatility of A under varying
 soil moisture and planting depths, its per-
 colation with the water flow and the rate of
 nitrification in the soil. --O.B.Vakhaistrov
 * Yarovenko, G.I.

CARD: 1/1

USSR/Soil Science. Mineral Fertilizers

J-5

Abs Jour : Rof Zhur - Biol., No 20, 1958, No 91443

P_2O_5 in mg. per 1 kg soil. Powdery P_8 (I), amorphos (II), P_p (III) and thermophosphate (IV) have been tested for the investigation of absorption. The result was that, independent of the manner of application of the phosphorus, the water-soluble P_2O_5 was completely absorbed by the soil during the very first 24 hours after the application of phosphorus. The amount of P_2O_5 extracted from the soil with 1 0/0 $(NH)_4CO_3$ at the application of I and II during the first day corresponds to 60 - 77 o/o of the phosphorus put into the soil. The corresponding figures for 100 and 200 days were 50% and 30 o/o. III and IV, when having been in contact with the soil for a long time, absorb less readily than I and II. 0.5 o/o CH_3COOH extracts 93 - 97 0/0 of the I - IV put into the soil within 100 days, within 200 days 60-80 o/o of I and II and 78-100 o/o of III. It has been

Card : 2/5

POPOVA, I.M., kand.sel'skohkhoz. nauk; PRISHCHEPA, A.G.; KUZ'KO, L.F.

Effectiveness of fertilizers in the irrigated lands in the
southern Ukraine. Zemledelie 26 no. 4-62-66 Ap '64.
(MIRA 17:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut oroshayemogo
zemledeliya.

POPOVA, I. M.

Popova, I. M.

"The effectiveness of various forms of phosphates on the light serozems of Pakhta-Aral." Kazakh Affiliate, All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin. Sci Res Inst of Farming imeni Academician V. R. Vil'yams. Tashkent, 1956. (Dissertation for the degree of Candidate in Agricultural Sciences)

Knizhnaya letopis
No. 15, 1956. Moscow

EXCERPTA MEDICA Sec 11 Vol 9/10 O.R.L. Oct 56

1898. POPOVA I.N. and KUDRINA T-A. *Radiotherapy of the inflammatory diseases of the paranasal cavities (Russian text) VESTN.OTO-RINO-LARING. 1955, 2 (35-38)

Radiotherapy has been applied in acute and chronic sinusitis in 120 patients in the following manner: 120 kv., 5 ma., 4 mm. Al filter, focal distance 24 cm., field 6 X 8 cm., daily dose 100 r. Three sessions on each side at intervals of 2 days, total dose of 300 r. The results have been effective, especially in the acute and subacute forms. In chronic sinusitis radiotherapy alone is able to bring cure in certain cases such as the catarrhal and the hyperplastic forms (especially the latter). In the suppurative forms of maxillary sinusitis radiotherapy may be very favourable when combined with punctures followed by instillations of penicillin.

Maximov - Sofia (XI,14)

EXCERPTA MEDICA Sec 14 Vol.10/11 Radiology Oct 56

1987. POPOVA I.N. and KUDRINA T.-A. *Radiotherapy of the inflammatory diseases of the paranasal cavities (Russian text) VESTN.OTO-RINO-LARING. 1955, 2 (35-38)

Radiotherapy has been applied in acute and chronic sinusitis in 120 patients in the following manner: 120 kv., 5 ma. 4 mm. Al filter, focal distance 24 cm., field 6 x 8 cm., daily dose 100 r. Three sessions on each side at intervals of 2 days, total dose of 300 r. The results have been effective, especially in the acute and subacute forms. In chronic sinusitis radiotherapy alone is able to bring cure in certain cases such as the catarrhal and the hyperplastic forms (especially the latter). In the suppurative forms of maxillary sinusitis radiotherapy may be very favourable when combined with punctures followed by instillations of penicillin.

Maximov - Sofia (XI, 14)

L 19196-63 EWP(q)/EWT(m)/BDS AFFTC/ASD Pad JD/HW/JG
 ACCESSION NR: AR3004194 S/0276/63/000/005/B115/B116

66
 58

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 5B568

AUTHOR: Popova, I. N.

TITLE: Bright nickel plating in electrolytes with compensating admixtures

CITED SOURCE: Nauchno-tekhn. sb. Proyechn., tekhnol. i n.-i. in-t Gor'kovsk.
 sovmarkhoza. Gor'kiy, 1962, 79-84

TOPIC TAGS: nickel plating, electrolyte, compensating admixture, electrolyte composition, bright nickel plating

TRANSLATION: Results are given of investigations of the bright finishing nickel plating process carried out at PTNII (Gor'kiy). Electrolyte developed in ChSSR has been taken as a base. Composition of the electrolyte (in g/l) : 250 to 300 nickel sulfate; 60 to 80 nickel chloride; 30 boric acid; 0.6 of coumarin; 0.05 syntapone; 1.5 to 2 para-toluenesulfamide. The electrolyte has been made from chemically pure salts on distilled water; mixing was made by swinging cathode rods. The process was determined on the basis of measurements of the degree of smoothness as function of current density and temperature. The smoothing effect

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ACCESSION NR: AR3004194

(average value of profile unevenness) on steel plates was determined by means of a microscope. It was proven that the elasticity and brightness of deposits did not alter when compressed air instead of cathode rods motion was used for mixing the electrolyte. Nor did they change when technical nickel was substituted for chemically pure nickel sulfate, and sodium chloride -- for nitrogen chloride during the preparation of electrolyte with drinking water. It was determined that para-toluene-sulfamide is not an antipitting addition and that it only protects parts against an increase in pitting as the admixture replacing syntapone emulsifier OP-7 was used. It is shown that previously formed pitting may be eliminated by a supplementary addition of emulsifier. Investigations carried out by NIIAvtoprom and in the laboratory of Gor'kovskiy avtomobil'nyy zavod Automotive Plant on application of domestic antipitting admixture "Progress" proved this admixture to be better than any tested antipitting additions. It is remarked that as a result of performed work, the investigated electrolyte has been made more than 4 times cheaper, and cost approached the price of the electrolyte of bright nickel plating with naphthalene disulfonic acid.

DATE ACQ: 21Jun63

SUB CODE: IE, MA

ENCL: 00

Card 2/2

POPOVA, I.M.

Chronic diseases of otorhinolaryngological organs and predisposition to influenza and acute rhinitis of the upper respiratory tract.
Vest. oto-rin. 16 no.6:60-62 N-D '54. (MLRA 8:1)

1. Iz polikliniki No.1 Ministerstva zdravookhraneniya.

(OTORHINOLARYNGOLOGY

dis., chronic, eff. on predisposition to influenza & rhinitis of upper resp. tract)

(INFLUENZA, etiology and pathogen.

otorhinolaryngol. organs dis. effecting predisposition)

(RESPIRATORY TRACT, diseases

predisposition, eff. of dis. of otorhinolaryngol. organs)

POPOVA, I.N.; KUDRINA, T.A.

Roentgenotherapy in inflammatory diseases of the accessory of the
sinuses of the nose. Vest.oto-rin 17 no.2:35-38 Mr-Ap '55.
(MLRA 8:7)

1. Iz polikliniki No. 1 Ministerstva zdravookhraneniya SSSR.
(SINUSITIS,

paranasal, ther., x-ray)
(RADIOTHERAPY, in various diseases,
sinusitis, paranasal)

USSR/Plant Diseases. Diseases of Cultivated Plants

0-3

Abs Jour : Ref Zhur - Biol., No 10, 1953, No 44470

Author : Popova I.V.

Inst : -

Title : The Employment of Antiseptics to Control Beet Storage

Orig Pub : Sakharnaya prom-st', 1957, No 10, 54-55

Abstract : No abstract

Card : 1/1

POPOVA, I.V., nauchnyy sotrudnik; TUCHIN, V.F., nauchnyy sotrudnik

Forecast for sugar beet pests and diseases. Zashch. rast. ot
vred. i bol. 9 no. 4:40-41 '64. (MIRA 17:5)

1. Vserossiyskiy institut sakharnoy svekly i sakhara, Voronezhskaya
obl.

BOYARSKIY, M.N.; KLEVYADO, A.N., преподаvatel' istorii partii; LANDO, M.E.;
 MOLOTKOV, L.D.; POPOVA, I.Y., istorik; TKACHENKO, P.M.; POCHEBUT,
 G.A., kand.istor.nauk, starshiy nauchnyy sotrudnik, nauchnyy red.;
 ROZANOV, M.D., red.; TIKHONOVA, I.M., tekhn.red.

[Resources for electrification; brief description of the history
 of the Leningrad "Electric power" Plant named in honor of S.M.
 Kirov] Arsenal elektrifikatsii; kratkii ocherk istorii leningrad-
 skogo zavoda "Elektrosila" imeni S.M.Kirova. Leningrad, Lenizdat,
 1960. 267 p. (MIRA 13:7)

1. Zamestitel' direktora zavoda "Elektrosila" (for Boyarskiy).
2. Nachal'nik byuro tekhnicheskoy informatsii zavoda "Elektrosila"
 (for Lando). 3. Redaktor zavodskoy gazety "Elektrosila" leningrad-
 skogo zavoda "Elektrosila" (for Molotkov). 4. Tekhnicheskii muzey
 zavoda "Elektrosila" (for Popova). 5. Zaveduyushchiy kabinetom
 politicheskogo prosveshcheniya partkoma zavoda "Elektrosila" (for
 Tkachenko). 6. Institut istorii partii pri Leningradskom obkome
 Kommunisticheskoy partii Sovetskogo Soyuza (for Pochebut).
 (Leningrad--Electric power plants)

COUNTRY	: USSR
CATEGORY	: Cultivated Plants. Commercial. Oleiferous. M
REF. JOUR.	: RZhS, No. 1, 1959, No. 1758
AUTHOR	: Ponova, I.V.
INST.	:
TITLE	: The Effectiveness of Sugar Beet Selection on the Resistance to Storage Rot.
ORIG. PUB.	: Agrobiologiya, 1958, No. 1, 118-120
ABSTRACT	: For the verification of the effectiveness of biological determination of the degree of storage rot contamination in sugar beet roots, the roots of four resistant and four non-resistant samples to rot decomposition were connected and placed for prolonged storage in industrial bins. Storage of the roots in the bins [in networks] was continued for 67 days. The experiment was performed in the year 1958 and was repeated in the year 1959. It was established that the roots which decompose more vigorously under testing of the microbiological
CARD	112

POPOVA, Izabella Veniaminovna; DENISOV, Vasilii Nikolayevich; SMIRNOVA,
G.V., tekhn. red.

[Tables for calculating liquid-fuel consumption norms for motor
vehicles] Tablitsy dlia podscheta norm raskhoda zhidkogo topliva dlia
avtomobilei. Moskva, Mashgiz, 1961. 191 p. (MIRA 14:11)
(Motor vehicles—Fuel consumption)

POPOVA, I.V., starshiy nauchnyy sotrudnik; MAKARENKO, Ye.Ye., starshiy
nauchnyy sotrudnik

Forecast for 1963. Zashch. rast. ot vred. i bol. 8 no.4:
43-46 Ap '63. (MIRA 16:10)

1. Vserossiyskiy institut sakharnoy svekly i sakhara, Ramon',
Voronezhskoy oblasti.
(Sugar beets--Diseases and pests)

REPORT
POPOVA, I.V.

Effectiveness of selection in developing rot-resistant sugar beet varieties. Agrobiologiya no.1:128-130 Ja-F '58. (MIRA 11:2)

1. Ramenskaya selektsionnaya stantsiya.
(Sugar beet breeding) (Sugar beets--Disease and pest resistance)

NIKOL'SKAYA, Ye.B.; PEN'GA, N.Y.; IVANNIKOV, M.A.; POLINA, L.S.

Effect of temperature on the activity of alkaline phosphatase
irradiated with ^{60}Co gamma rays. Radiobiologiya 5 no.3:100-104
1965 '65. (MIRA 1967)

1. Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut,
i Leningradskaya klinicheskaya bol'nitsa imeni Mervinskova.

Pопова, I.V.

POPOVA, I.V.

Using disinfectants to control storage rot. Sakh. prom. 31 no.10:
54-55 0 '57. (MIRA 11:1)

1. Ramon'skaya selektsionnaya stantsiya.
(Sugar beets--Disinfection)

POPOVA, I.V.

Breeding sugar beets for the resistance to storage rot.
Agrobiologiya no.5:762-763 S-0 '61. (MIRA 14:10)

1. Vserossiyskiy nauchno-issledovatel'skiy institut sakharnoy
svekly i sakhara, Voronezhskaya oblast'.
(Sugar beets—Diseases ~~and pests~~)

POPOVA I. V.

DEKISOV, V.N.; POPOVA, I.V.; LEVIN, D.M., inzhener, retsenzent; POPOVA, S.M., ~~tekhnicheskii~~ redaktor.

[Tables for computing the standard fuel consumption of automobiles]
Tablitsy podscheta norm raskhoda benzina dlia avtomobilei. Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1953. 120 p.
[Microfilm] (MLBA 7:11)

(Automobiles--Fuel consumption)

POPOVA, I. V.

6486 17
~~MESON-NUCLEON PHASE SHIFTS OF SCATTERING IN~~
 ENERGIES UP TO 319 MEV. A. I. Makhin, I. V. Popova,
 and G. M. Tentyukova. Doklady Akad. Nauk SSSR 111,
 236-8 (1957) Jan. 11. (In Russian)

Studies were made of meson-nucleon scatterings at
 ~ 200 to ~ 300 Mev with the purpose of observing meson
 interactions with protons in S, P, and D states. Analytical
 data are given on π^+ meson scattering on hydrogen with
 the assumption that its contribution to scattering in D
 states is negligibly small, i.e. that the scattering occurs

only in S and P states (S-P analysis) and with the assump-
 tion that its contribution to D states is considerable (S-P-D
 analysis). The tables for both S-P and S-P-D analysis and
 diagrams of the angular distribution of π^+ mesons elasti-
 cally scattered on hydrogen are presented. (R.V.J.)

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 1 - pmk

POPOVA, K., kandidat tekhnicheskikh nauk

Determining the amount of ammonia and monoethanolamine in carbon
dioxide. Khol.tekh. 32 no.1:66 Ja-Mr '55. (MLRA 8:7)
(Carbon dioxide) (Ammonia) (Ethanol)

POPOVA, K.

The investigation of oxidation process of monoethanolamine solutions. K. Popova. *Khimiya i Tekhn. 23*, No. 4781-5 (1968). The loss of monoethanolamine I from oxidation by air O₂, the increase of foaming in soln. by oxidation products, and the decrease of effectivity of I were studied. The d., viscosity, surface tension, and color of the prepd. soln. were measured before and after oxidation. The prepd. soln. heated to 100° and treated during 160 hrs. with pure air, air + 5 ml./hr. SO₂, and air + 5 ml./hr. SO₂ + 1 ml./hr. H₂S. After oxidation the loss by air oxidation was 2 g./l. The addn. of SO₂ and H₂S increased the loss. Oxidation by pure O₂ in 160 hrs. decreased 1.23%. The loss of the soln. depends on the concn. of monoethanolamine, extent of satn. of CO₂, accumulation of S, and products of polymerization of I. The d. indicates the purity of the I soln. Viscosity increases with concn. of the products of I polymerization.

POPOVA, K., kand.tekhn.nauk

Investigating the oxidation of monoethanolamine solutions.
Khol.tekh. 33 no.4:61-65 Q-D '56. (MIRA 12:1)
(Ethanol)

POPOVA, K.; TEZIKOV, A.

Dry ice plants operating with a solution of monoethanolamine containing
soda ash. Khol.tekh. 36 no.1:56-57 Ja-F '59. (MIRA 12:3)
(Dry ice) (Ethanol)

AUTHORS: Popova, K., Tezikov, A. SOV/66-59-1-14/32

TITLE: The Work of the Dry Ice Plants Using a Solution of Monoethanolamine With the Addition of Calcinated Soda (Rabota zavodov sukhogo l'da na rastvore monoetanolamina s dobavleniyem kal'tsinirovannoy sody)

PERIODICAL: Kholodil'naya tekhnika, 1959, Nr 1, pp 56-57 (USSR)

ABSTRACT: The Experimental Dry Ice Plant of VNIKhI has investigated the effectiveness of adding to a solution of monoethanolamine a certain amount of calcinated soda. To a polluted solution of monoethanolamine, which had been in operation for 126 days, portions of calcinated soda (74 g/l) were added, which raised the coefficient of absorption by 16.9% and increased the daily output by 15.8%. Moreover, the presence of calcinated soda in the solution reduces the mechanical losses of monoethanolamine by 35% and eliminates its consumption for polymerization and combination with sulfuric compounds. Various dry ice plants have followed the recommendation given by VNIKhI and were likewise successful in reducing the consumption of mono-

Card 1/2

SOV/66-59-1-14/32

The Work of the Dry Ice Plants Using a Solution of Monoethanolamine With the Addition of Calcinated Soda

ethanolamine and increasing production of dry ice. A comparative table gives the detailed results obtained by 4 different dry ice plants in Leningrad, Moscow, Kiyev and Kramatorsk. There is one table.

Card 2/2

BABAYEVA, Ye.; DERYUGINA, Ye.; MAZNICHENKO, V.; POPOVA, K.

Physical education period for assembly-line workers. Sotsi trud 8 no.6:
132-133 Je '63. (MIRA 16:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fizicheskoy kul'tury.

(Assembly-line method)
(Industrial hygiene)

POPOVA, K.

Machine-Tractor Stations

Increase qualification for mechanization personnel, MTS, 12, No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 195²~~3~~, Uncl.

AUTHOR: Popova, K., Candidate of Technical Sciences. 66-1-13/26

TITLE: Addition of soda ash to the monoethanol amine solution.
(Dobavleniye kal'tsinirovannoy sody v rastvor monoetanol-
amina).

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering),
1957, No.1, pp.39-43 (U.S.S.R.)

ABSTRACT: Addition of soda ash into the operating solution and subsequent boiling of the solution during operation should lead to exchange reactions, as a result of which the monoethanol amine is freed from sulphur and thiosulphates and sodium sulphates are formed. Accumulation of these does not reduce the absorption ability of the solution and the liberated part of the monoethanol amine will improve the absorption capacity of the solution. Experiments were made to verify the possibility of liberating monoethanol amine from its bonds with sulphurous compounds by introducing soda ash and thereby to regenerate the monoethanol amine without additional costs involved in using and operating distilling apparatus. The experiments consisted of laboratory investigation of a fresh 10% monoethanol amine solution, a pure solution and a solution containing 33 g/litre of soda ash and, furthermore, verification was carried out of the

Card 1/3

Addition of soda ash to the monoethanol amine solution.
(Cont.)

66-1-13/26

effectiveness of the addition of soda to contaminated monoethanol amine working solution. For both fresh solutions the absorption ability relative to CO_2 was determined on a test rig shown diagrammatically on p.40. The physico-chemical characteristics of the fresh and of the contaminated solutions before and after adding soda ash were also determined and the results are entered in Table 1. It can be seen from the data that addition of 33 g/litre of soda ash improves the viscosity, the specific gravity and the CO_2 content in the solution without materially affecting the foaming properties, the surface pressure and the absorption ability of the solution. This indicates that addition of soda ash to the fresh solution does not deteriorate the physico-chemical properties or the absorption ability relative to CO_2 . The effectiveness of introducing soda ash into the operating solution was verified under operating conditions in the dry ice shop of the experimental cold store of VNIKhI. It was established that addition of 74 g/litre of soda ash into the solution which has been in operation for 126 days brought about an increase of the absorption coefficient by 16.9% and an increase of the productivity of the plant by 15.8%; the

Card 2/3

POPOVA, K.A.

Subcutaneous emphysema following labor. Akush. i gin. 39 no.3:
124 My-Je'63 (MIRA 17:2)

1. Lukoyanov's'ogo roditel'nogo doma (zav. - K.A. Popova) Gor'kovskoy oblasti.

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77156
SOV/129-60-1-4/22

Popova, K. A.

AUTHORS: Gerasimov, V. V. (Candidate of Technical Sciences),
Popova, K. A. (Engineer)

TITLE: Intercrystalline Corrosion of 1Kh18N9T-Steel in
Steam and Water Media

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, Nr 1, pp 13-14 (USSR)

ABSTRACT: The authors investigated the susceptibility to corrosion
under the action of water and steam in 1Kh18N9T-steel.
Three types of specimens with the following composition
were tested: (1) C, 0.008; Si, 0.51; Mn, 1.19; Cr, 17.45;
Ni, 9.49; Ti, 0.7%. (2) C, 0.11; Si, 0.73; Mn, 1; Cr,
17.3; Ni, 9.61; Ti, 0.37%. (3) C, 0.16; Si, 0.75; Mn,
0.51; Cr, 17.3; Ni, 9.4; Ti, 0.65%. In State Standard
tests (GOST 6032-51) intercrystalline corrosion was not
observed in specimens of group (1) but appeared in
groups (2) and (3). In an attempt to prove that contrary
to State Standard test methods intercrystalline corrosion
does not necessarily develop in all media, the authors

Card 1/2

Inter-crystalline Corrosion of 1Kh18N9T-Steel
in Steam and Water Media

77156

307/129-60-1-4/22

investigated austenitized and annealed (at 650° C for 2 hr) specimens as follows: (1) flat 30 x 8 x 1.5 mm specimens were exposed to steam in an autoclave for 1,000 hr at 350° C, p = 170 kg/cm²; (2) tubular 200 mm long welded specimens with 15 x 2.5 mm diameter were held in distilled water at 350° C for 500, 1,000, and 2,000 hr, p = 160 kg/cm², and 550° C, p = 200 kg/cm². Stress in metal: 4 to 4.7 kg/mm². A dense oxide film developed on all specimens. Bending by 90° C failed to produce cracking. Inter-crystalline corrosion was not observed. The authors believe that grain boundaries dechromized in water and steam are in a state of passivity; this assumption is corroborated by the work of D. I. Depaul, "Corrosion," 13, Nr 1, 1957. There is 1 table; and 1 U.S. reference as given in text.

Card 2/2

GERASIMOV, V.V.; POPOVA, K.A.

[Intercrystalline corrosion of IX18H9T steel in steam and water at high temperatures and pressures] Mezhkristallit-naia korroziia stali IX18H9T v pare i vode pri vysokikh temperaturakh i davleniiakh. Moskva, Glav. upr. po ispol'-zovaniyu atomnoi energii, 1960. 6 p. (MIRA 17:2)

FOICVA, E. A.

"Study of Preventive Measures Against Dictyocaulus of Cattle." Thesis for degree of Cand. Veterinary Sci., Sub 15 Jun 49, All-Union Inst of Helminthology.

■ Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

POPOVA, K. A.

COUNTRY : USSR R
 CATEGORY : Diseases of Farm Animals. Diseases Caused by Helminths
 ABS. JOUR. : RZhBiol., No. 6 1959, No. 26012
 AUTHOR : Ozerskaya, V. N.; Popova, K. A.
 INST. : - *Kursk Sta Res Vet. Station*
 TITLE : Comparative Evaluation of Subcutaneous and Intratracheal Introduction of Iodine Solution in Dictyocaulosis of Calves
 ORIG. PUB. : Veterinariya, 1958³⁵, No 4, 41-43
 ABSTRACT : The experiment was carried out on 26 calves, of which 10 were controls. The intratracheal introduction of iodine solution into 5 calves sharply reduced the quantity of excreted larvae, and 3 calves which were killed and autopsied were found to be completely free from Dictyocauli. The subcutaneous injections of aqueous iodine solution into 11 calves did not reduce dictyocaulous in-

CARD: 1/2

34

POPOVA, K.A., kand.veterinarnykh nauk

Kursk Veterinary Research Station. Trudy VIEV 23:388-389 '59.
(MIRA 13:10)

(Kursk--Veterinary research)

POPOVA, K A.

36

PHASE I BOOK EXPLOITATION

SOV/5256

Gerasimov, Valentin Vladimirovich, ed., Candidate of Chemical Sciences.

Korroziya reaktornykh materialov; sbornik statey (Corrosion of Nuclear-Reactor Materials; a Collection of Articles) Moscow, Atomizdat, 1960. 284 p. 3,700 copies printed.

Ed.: A.I. Zavodchikova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This collection of articles is intended for mechanical and metallurgical engineers as well as for scientific research workers concerned with the construction of nuclear reactors.

COVERAGE: The water corrosion of various types of stainless steel and alloys under high pressures and temperatures is investigated from the point of view of the use of these materials for the construction of nuclear reactors. Attention is given to the following: the use of oxygen for protecting steel against corrosion, the behavior of steel in high-temperature

Card 1/9

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Corrosion of Nuclear- (Cont.)

SOV/5256

water with various compositions, factors of metal stress corrosion, intergranular corrosion, the mechanism of corrosion cracking, and the corrosion resistance of aluminum and zirconium alloys. Conclusions based on test results are included. No personalities are mentioned. Most of the articles are accompanied by references. Of 238 references 87 are Soviet.

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PART I. METHODS OF INVESTIGATING WATER
AND ELECTROCHEMICAL CORROSION AT
HIGH TEMPERATURES AND PRESSURES

5

Gulyayev, V.N., and P.A. Akol'zin. Methods of Testing the Corrosion-Creep Strength of Metals at High Pressures and Temperatures
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Card 5/9

S/081/61/000/020/049/089
B107/B101

AUTHORS: Gerasimov, V. V., Aleksandrova, V. N., Gromova, A. I.,
Popova, K. A. Shapovalov, E. T.

TITLE: Study of the electrochemical behavior and the corrosion
behavior of 1X18H9T (1Kh18N9T) stainless steel in water of
different compositions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 259, abstract
201146 (Sb. "Korroziya reaktorn. materialov". M., Atomizdat,
1960, 52-63)

TEXT: The authors studied the kinetics of electrode processes of 1X18H9T
(1Kh18N9T) stainless steel in distilled water and in solutions of Na_2SO_3
and Na_2SO_4 , HNO_3 , HCl and H_2SO_4 , NaOH , NaCl at room temperature and 300°C ,
and at 87 atm pressure. It was shown that in all media, except for 0.15 N HCl ,
the 1Kh18N9T steel was in a passive state at corresponding potential values;
in the solutions mentioned, the rate of dissolution was $0.016 - 0.020 \mu\text{a}/\text{cm}^2$.

Card 1/2

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28565 3/137/61/000/009/069/087
A060/A101

AUTHORS: Gerasimov, V. V., Popova, K. A.

TITLE: Investigation of the mechanism of corrosion cracking in steel
1X18H9T (1Kh18N9T)

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1961, 53, abstract 9I360
(V sb. "Korroziya reaktorn. materialov". Moscow, Atomizdat, 1960,
102-108)

TEXT: The investigation was carried out upon the mechanism of corrosion cracking and the kinetics of electrode processes in steel 1Kh18N9T used in nuclear power installations. The effect of mechanical stresses up to 33.3 kg/mm^2 was studied in distilled water, in 0.01 n. solution of Na_2SO_4 ; 0.001 n. HNO_3 ; 0.001 n. NaOH ; 0.01 n. NaCl . The plan of the installation for the electrochemical investigations of loaded specimens is given. Tensile stresses in stainless steel do not affect the rate of the cathode process and the rate of steel dissolution in the passive state in the NaCl solution, in contradistinction to other media investigated; the tensile stresses affect considerably the kinetics of the anode process, narrowing the region of the passive state and

Card 1/2

Investigation of the mechanism ...

28565

S/137/61/000/009/069/087
A060/A101

accelerating the rate of metal dissolution. An increase in the concentration of Cl^- in the solution acts upon the kinetics of the anode process analogously to an increase in the tensile stresses in the metal. On the basis of the electrochemical investigations, a mechanism of the corrosion cracking of steel 1Kh18N9T is proposed, and also methods of calculating the concentrations of O_2 and Cl in solution which are dangerous from the viewpoint of corrosion cracking.

Ye. Layner

[Abstracter's note: Complete translation]



Card 2/2

18 8300

28568

S/137/61/000/009/074/087
AC60/A101

AUTHORS: Gerasimov, V. V., Fopova, K. A.

TITLE: Intercrystallite corrosion of steel 1X1849T (1Kh18N9T) in water and steam at high temperatures and pressures

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1961, 54, abstract 9I365 (V sb. "Korroziya reaktorn. materialov". Moscow, Atomizdat, 1960, 148-150)

TEXT: Tests were carried out on steel 1Kh18N9T in deaerated water at a temperature of 350°C and pressure 170 atm, as well as in deaerated steam at a temperature of 550°C, pressure of 200 atm with a soaking for 2,000 hours. In stainless steel of the type 1Kh18N9T having a tendency towards intercrystallite corrosion (according to GOST 6032 - 51), the latter does not develop in deaerated steam and water environment at temperatures up to 550°C.

Ye. Layner

[Abstracter's note: Complete translation]

Card 1/1

GERASIMOV, V.V.; POFOVA, K.A.

[Investigating the mechanism of the corrosion cracking
of 1Kh18N9T austenitic stainless steel] Issledovanie me-
khanizma korrozionnogo rastreskivaniia austenitnoi ner-
zhaveiushchei stali 1Kh18N9T. Moskva, Glav. upr. po is-
pol'zovaniu atomnoi energii, 1960. 11 p.

(MIRA 17:1)

(Steel, Stainless--Corrosion)
(Electrolytic corrosion)

GERASIMOV, V.V.; ALEKSANDROVA, V.I.; GROMOVA, A.I.; POPOVA, K.A.;
SHAPOVALOV, E.T.

[Investigating the electrochemical and corrosion behavior
or 1Kh18N9T stainless steel in water of various composi-
tion] Issledovanie elektrokhimicheskogo i korroziionnogo
povedeniia nerzhaveiushchei stali 1Kh18N9T v vode razlich-
noho sostava. Moskva, Glav.upr. po ispol'zovaniyu atomnoi
energii, 1960. 17 p. (MIRA 17:1)
(Steel, Stainless--Corrosion) (Electrochemistry)

POPOVA, K.B.

812.843.31
 8637. COLOUR-DISTINCTION THRESHOLDS OF MACRO
 DETAILS OF COLOUR PHOTOGRAPHS IN TERMS OF CON-
 CENTRATION. Yu.N. GORODKOV and K.B. POPOVA
 Dokl. Akad. Nauk SSSR, Vol. 197, No. 1, 63-64, 1980. In
 Russian.

The thresholds were determined by means of test plates
 of different degree of contrast, each of which was a slide con-
 sisting of 12 rows of differently orientated Landolt rings on a
 bright background. The test plates of different contrast were
 prepared photographically on single-layer colour films coated
 with separate layers of multi-layer positive colour film. The
 contrast of the single-colour images was determined by the
 difference of visual equivalent-grey densities, i.e. by the dif-
 ference of the relative (reduced to greyness) surface concen-
 trations of the dye between the dark ring and the bright back-
 ground. Black-white images were also investigated. The test
 plates were viewed in transmitted light by 5 observers at
 800 luxes. It was found that the distinction thresholds of macro
 details decreased in the following sequence: yellow, blue, and
 purple dyes, and black-white images.

F. Lachman

GOROKHOVSKIY, Yu.N.; POPOVA, K.B.

Thresholds of color discrimination in macrodetails of color photographic images in terms of dye concentration values, Dokl.AN SSSR 107 no.1: 63-66 Mr '56. (MLRA 9:7)

1. Predstavleno akademikom A.A. Lebedevym.
(Color photography)

ПОПОВ, РОМАН / " ГЕОГРАФИКА "

ALTUNDZHI, Sergey Vladimirovich; BUKHARIN, Viktor Vladimirovich;
DOBKINA, Yevgeniya Abramovna; KUZNETSOV, Nikolay Mikhaylo-
vich, inzh.; POPOVA, Kseniya Georgiyevna; TSEZIKOV, Aleksandr
Dmitriyevich; FRADIN, Leon Romanovich; BAYL'KES, I.TS.,
doktor tekhn.nauk, retsenzent; SKIRSTYMONSKIY, A.I., inzh.,
retsenzent; PRITYKINA, L.A., red.; SOKOLOVA, I.A., tekhn.red.

[Production and use of liquid carbonic acid] Proizvodstvo i
primeneniye zhidkoi uglekisloty. Moskva, Pishchepromizdat,
1959. 207 p. (MIRA 13:2)

(Carbonic acid)

GOROKHOVSKIY, Yu.N.; LEVINA, V.V.; MOPOVA, N.B.

Using the "diatent" method for testing color printing papers.
Zhur.nauch.i prikl.fot. i kin. 6 no.4:289-293 ~~Jl-Ag~~ '61.

(MIRA 14:11)

1. Gosudarstvennyy opticheskiy institut imeni S.I. Vavilova.
(Color photography--Printing papers)

S/058/63/000/002/032/070
AC62/A101

AUTHORS: Gorokhovskiy, Yu. N., Popova, K. B.

TITLE: Dependence of color reproduction on the spectral distribution
of the light sensitivity of the layers of negative multilayer films

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1963, 100, abstract 2D648
("Uspekhi nauchn. fotogr.", 1962, v. 8, 146 - 154)

TEXT: A study was made of the influence of the width of the spectral regions of light sensitivity of the elementary layers of a negative multilayer film on the quality of color reproduction when photographing multicolor objects typical as to the character of their spectral reflection capability. It is shown that under conditions of the usual negative-positive color photography process, using dyes with appreciable parasitic absorption, the change within wide limits of the width of the sensitivity regions of the layers does not practically affect the quality of reproduction for the whole set of colors of the objects, although for separate elements of the objects some fluctuations of the chromaticity take place. Only for very wide sensitivity zones, when the degree of their mutual overlapping attains 20% and more, a substantial deterioration of the photographic reproduction of the

Card 1/2

Dependence of color reproduction on...

S/058/63/000/002/032/070
A062/A101

majority of colors is observed. Thus, under conditions of the normal color photography process on multilayer materials, the fact is confirmed, as previously predicted for other processes of color reproduction, that the quality of color reproduction is determined by the spectrophotometric qualities of the formed dyes in a considerably larger measure than by the spectral distribution of the light sensitivity of the triad of negative materials utilized for color separation.

[Abstracter's note: Complete translation]

Card 2/2

LEVITIN, I.B., kand.tekhn.nauk; MYASNIKOVA, N.G., inzh.; POPOVA, K.B.,
nauchnyy sotrudnik; SINTSOV, V.N., nauchnyy sotrudnik

Study of the temperature fields of electrical apparatus using an
evaporograph. Vest. elektroprom. 34 no.1:18-23 Ja '63.

(MIRA 16:1)

(Electric apparatus and appliances)

(Temperature--Measurement)

POPOVA, K.R.; SINTSOV, V.N.; FAYERMAN, G.P.

Experimental use of the evaporograph for obtaining an infrared
image of the moon. Astron.zhur. 41 no.1:110-111 Ja-F '64.

(MIRA 17:4)

1. Gosudarstvennyy opticheskiy institut im. S.I.Vavilova.

GOROKHOVSKIY, Yu.N.; POPOVA, K.B.

Effect of the spectrum distribution of the sensitivity of the
layers of negative multilayer films on color reproduction. Usp.
nauch. fot. 8:146-154 '62. (MIRA 17:7)

ACCESSION NR: AP4017621

S/0033/64/041/001/0110/0111

AUTHOR: Popova, K. B.; Sintsov, V. N.; Fayerman, G. P.

TITLE: Experimental application of the evaporograph for obtaining an infrared image of the moon

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 1, 1964, 110-111

TOPIC TAGS: evaporograph, moon, lunar image, radiation, infrared radiation, thermal radiation

ABSTRACT: The availability of a working model of an evaporograph (G. P. Fayerman, V. N. Sintsov, K. B. Popova, Optiko-mekhanicheskaya promy'shlennost', no. 11, 27, 1962) permitted the authors to test the applicability of this instrument for obtaining lunar images in the infrared region of the spectrum. These tests were conducted from 24 to 28 July, 1961 at the Kry*mskaya Astrofizicheskaya Observatoriya Akademii Nauk SSSR (Crimean Astrophysical Observatory of the Academy of Sciences of the SSSR). The first series of tests consisted in photographing the moon using a working model of an evaporograph with a mirror-lens optical system ($f = 200\text{mm}$; $Z_{\text{geom.}} = 1, 1.6$; $Z_{\text{eff.}} = 1:2$) with a lens manufactured of crystal NaF. The spectral region passed by the optical system of the instrument lay within an interval of 0.8-8.5 microns. At the moment of photography,

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the moon was at a position between its first quarter and its full stage, with 3/4 of its surface illuminated by the sun. An image of the moon was obtained on the membrane of the evaporograph within 3-5 seconds after the beginning of the exposure. Details of the development procedure are given in the article. The image obtained was clear and distinct, but was too small (1.8 mm) to permit the revelation of any surface detail. Since the passband of the instrument was limited to 8.5 microns in the direction of the long waves, obviously it was primarily the reflected infrared radiation of the moon that was recorded. In a later series of tests, an MTM-500 telescope was used in place of the evaporograph objective, in order to secure a larger lunar image. The arrangement used in this series resulted in an image of the moon having a diameter of 58 mm; that is, almost twice the diameter of the evaporograph membrane. Hence, only a part of the lunar disc was visible. It was found that the sensitivity of the receiver was scarcely sufficient to obtain the infrared image given by the optical system of the telescope. The test results showed, in conclusion, that by means of an evaporographic receiver it is possible to obtain moon images in the reflected infrared radiation of the sun, and, provided the instrument has sufficient light-admittance and spectral passband, in its own thermal radiation as well — at least, in all likelihood. This follows, in particular, from data in the technical literature demonstrating

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TATARSKAYA, G.A.; POPOVA, K.I.; SHUL'MAN, S.A.

Sonne dysentery in Rostov-on-Don. Sov.med. 21 Supplement:9 '57.
(MIRA 11:2)

1. Iz Rostovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(ROSTOV-ON-DON--DYSENTERY)

NIKITINA, Ye.V.; PROTOPOPOV, G.F.; ROZHEVITS, R.Yu. [deceased]; POPOVA, K.I.;
 KASHCHENKO, L.I.; SMIRNOV, L.A.; TKACHENKO, V.I.; YAKUBOVA, P.A.;
 GOLOVKOVA, A.G.; AYDAROVA, P.A.; SEPOTA, Ye.I.; SHEVCHENKO, D.A.;
 SHISHKIN, Boris Konstantinovich, professor, doktor biologicheskikh
 nauk, nauchnyy redaktor; VVEDENSKIY, A.I., nauchnyy redaktor;
 YEVVRUSHENKO, G.A., professor, otvetstvennyy redaktor; KOVALEV, V.N.,
 otvetstvennyy redaktor; SEREBRYAKOV, V.I., tekhnicheskiy redaktor

[The flora of Kirghizistan; classification of the plants of
 Kirghizistan] Flora Kirgizskoi SSR; opredelitel' rastenii Kirgizskoi
 SSR. Sost. E.V.Nikitina i dr. Frunze, Izd-vo Akademii nauk Kirgizskoi
 SSR. Vol.1. [Pteridophyta, Gymnosperms and Monocotyledons of the
 Angiosperms] Paprotnikoobraznye, golosemennye i odnodol'nye i
 pokrytosemennyykh. 1952. 103 p. Vol. 2. [Grasses and sedges] Zlaki
 i osokovye. 1950. 315 p. Vol.3. [Aroidae - Orchidaceae] Aroidnye -
 Orkhidnye. 1951. 148 p. Vol.4. [Salicaceae - Polygonaceae] Ivovye -
 Grechishnye. 1953. 153 p. Vol. 5. [Families: Chenopodiaceae,
 Amaranthaceae, Portulacaceae, Caryophyllaceae] Semeistva: Marevye,
 Amarantovye, Portulakovye, Gvozdnichnye. 1955. 185 p. Vol. 6.
 [Families: Ceratophyllaceae, Ranunculaceae, Berberidaceae,
 Papaveraceae, Capparidaceae, Cruciferae] Semeistva: Rogolistnikovye,
 Liutikovye, Barbarisovye, Makovye, Kapersovye, Krestotsvetnye. 1955.
 297 p.
 (MIRA 9:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Shishkin)
 (Kirghizistan--Botany)

POPOVA, K.I.; RUTKOVSKAYA, N.V.

Relationship between precipitation and the circulation regime
during the cold period over the southeastern part of the West
Siberian Lowland. Trudy GGO no.113:22-30 '60. (MIRA 14:3)
(Siberia, Western—Snow)

PCPCVA, K. I.

"The action of Hydrogen-Sulfide Carbonic-Acid Mud Baths on an Organism."
Sub 18 Sep 51, Central Inst for the Advanced Training of Physicians.

Dissertations presented for science and engineering degrees in Moscow
during 1951.

SO: Sum. No. 480, 9 May 55.

ПОПОВА, К.И.

Popova, K.I. "The effect of H₂S-CO₂-mud baths on the cardiovascular system", Trudy Kazansk. gos. med. in-ta, 1949, Issue 1, p. 21-33, -Bibliog: 73 items.

SO: U-411, 17 July 53, (Letopis Zhurnal 'nykh Statey, No. 20, 1949)

ZVONKOV, V.V., otv.red.; KUZNETSOV, I.A., kand.tekhn.nauk, red.;
TURCHINOVICH, V.T., prof., red.; POPOVA, K.L., kand.tekhn.
nauk, red.; KUDASHEVA, I.G., red.izd-va; POLYAKOVA, T.V.,
tekhn.red.

[Studies on maximum flow, wave action, and sediment motion]
Issledovaniia maksimal'nogo stoka, volnovogo vozdeistviia i
dvizheniia nanosov. Moskva, 1960. 153 p.

(MIRA 13:11)

1. Akademiya nauk SSSR. Sovet po problemam vodnogo kho-
zyaystva. 2. Chlen-korrespondent AN SSSR (for Zvonkov).
(Hydrology)

POPOVA, K.I.

Geographical sources of moisture and the mechanism of precipitation formation in the southeastern part of the West Siberian Plain.
Trudy TGU 147:167-176 '57. (MIRA 16:5)

1. Kafedra klimatologii Tomskogo gosudarstvennogo universiteta imeni V.V.Kuybysheva.
(West Siberian Plain—Precipitation (Meteorology))

POPOVA, K.I.

Distribution and annual variation of precipitation in the southeastern part of the West Siberian Plain. Trudy TGU 147:177-190 '57;
(MIRA 16:5)

1. Kafedra klimatologii Tomskogo gosudarstvennogo universiteta imeni V.V.Kuybysheva.
(West Siberian Plain--Precipitation (Meteorology))

L 13774-65 EWT(1)/FCC Pa-4 AFETR GW

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\$2531/64/000/164/0064/0073

AUTHOR: Popova, K. I.

TITLE: The problem of atmospheric circulation over Western Siberia in summer

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy*, no. 164, 1964. Obshchaya i sinopticheskaya klimatologiya (General and synoptic climatology), 64-73

TOPIC TAGS: atmospheric circulation, climatology, cyclone, anticyclone

TRANSLATION: This article describes the peculiarities of atmospheric circulation over Western Siberia in the summer. There is a full analysis of the frequency of cyclones and anticyclones, determined on the basis of data for a 20-year period. The openness of the territory of Western Siberia, both for flow of cold Arctic air and for warm flow from Central Asia and Kazakhstan, causes an intense exchange of air masses over Western Siberia and the development of cyclonic activity, especially over the central part of the West Siberian lowland. This is reflected in the frequency of cyclonic formations, their deepening and the increase in the frequency of considerable diurnal deepening of cyclonic formations over these regions. The intense development of cyclonic activity on polar and old arctic

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fronts over Western Siberia during the summer indicates the presence of a climatic branch of the polar front over the southern regions of the West Siberian Lowland. In all the summer months the maximum frequency of southwesterly cyclones is observed in the zone between 42 and 52°N. In June over Western Siberia near 60°N there can be merging of two high-level frontal zones -- arctic and polar. This leads to a considerable deepening over Western Siberia of Icelandic, already frequently occluded cyclones in the range 60-64°N or in the extreme northeast. The stagnant character of westerly cyclones and the formation of high, nearly stagnant cyclones occurs in the regions of the confluence of the Ob' and Irtysh and also at the headwaters of the basin of the Taz River or over regions of the lower course of the Yenisei. In July, the mean depth of cyclones over Western Siberia is less than in June. A stagnant character of cyclones is noted either over the headwaters of the Taz basin, or over the southeastern part of Western Siberia. Over these regions, surface cyclonic formations describe loops moving counterclockwise. In August, a stagnant character of cyclones of the arctic front most frequently occurs over the Ob' estuary or over the lower Yenisei. In August, it is already possible to note features of winter circulation -- intensification of cyclonic activity over the north and its weakening over the center and especially the southeastern part of Western Siberia. Abundant precipitation in the Vasyugan basin and on the interfluvium of the Ob' and Yenisei

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are to be expected because of the stagnant character of cyclonic formations in summer. The July precipitation maximum in the southern part of Western Siberia is related to intensification of cyclonic activity on the polar front. Southwesterly flow in the atmosphere over the Altay is caused by its position in the forward or southern part of moving southwesterly and westerly cyclones. As a result, on the northern slopes of the Altay there is a considerable development of cyclonic foehns; the foehn can be accompanied by the development of clouds over the range and even precipitation. The sharp transition from the steppe to taiga is related to an increase in the frequency of westerly and northwesterly cyclones carrying relatively moist air masses. The more frequent movement of cyclones from northwest to southwest in August in comparison with the preceding months causes considerable precipitation in Gornaya Shoriya and the northern Altay. Processes of generation of cyclones in summer are noted over Western Siberia in a number of specific regions. The considerable frequency of anti-cyclones in the southern part of Western Siberia causes frequent periods of clear weather with dry winds on the low-land and anticyclonic foehns in the high parts of the Altay. Orig. art. has: 4 tables and 3 figures.

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ASSOCIATION: Glavnaya geofizicheskaya observatoriya, Leningrad (Main
Geophysical Observatory)

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ENCL: 00

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